

New Records of Microlepidoptera for the County of Somerset

By A. M. EMMET

On the 20th of September 1972, my wife and I paid a flying visit to Leigh Woods on the Somerset side of the Avon Gorge. Although we could only spend three hours on the ground, our visit resulted in the identification of thirteen species not previously recorded from the county and the confirmation of eleven others listed by Turner (1955) as very rare or of doubtful occurrence. The purpose of the visit was to search for *Stigmella tiliae* Frey on the small-leaved lime, and most of our time was devoted to that tree; but we also searched for leaf-miners on a limited number of other pabula.

In the notes which follow, the species are listed under their food-plants. Those marked with two asterisks are, apparently, new to Somerset; those marked with a single asterisk are new to Leigh Woods. In the case of previously recorded species, Turner's estimate of their current status in the county is appended in square brackets.

Acer pseudoplatanus L. (Sycamore)

*****Phyllonorycter geniculella*** Rag. Mines not uncommon.

Agrimonia eupatoria L. (Agrimony)

*****Nepticula fragariella*** Heyd. Tenanted and vacated mines. The species has been unusually plentiful in the south of England in 1972.

Betula spp. (Birch)

*****Heliozela betulae*** Staint. Several vacated mines.

*****Caloptilia betulicola*** Her. Vacated rolled leaves.

Phyllorporia bistrigella Haw. Vacated mines. [Rare and local amongst birches.]

****Nepticula lapponica*** Wocke. Several vacated mines. [Rare and local on birch].

Crataegus monogyna Jacquin (Hawthorn)

Lyonetia clerkella L. Mines common; also on *Malus*. [Rather uncommon and local.]

*****Stigmella paradoxa*** Frey (*nitidella* Hein.) Two vacated mines. The nearest previously recorded locality is in Oxfordshire.

*****S. hybnerella*** Hübner. Vacated mines common. Turner's records for *Nepticula ignobilella* Staint, probably refer wholly or in part to *hybnerella*.

*****N. epticula pygmaeella*** Haw. Vacated mines common.

*****N. crataegella*** Klim. Vacated mines common. Turner's records for *N. oxyacanthella* Staint, probably embrace this species in the form of a first generation he falsely attributes to *oxyacanthella*.

*****Ectoedemia (Dechtiria) atricollis*** Staint. Several tenanted mines.

Fagus sylvatica L. (Beech)

Pammene weirana Doug. A larva between spun leaves. [Local and uncommon].

Fragaria vesca L. (Wild strawberry)

****Ectoedemia** (*Dechtiria*) *arcuatella* H.-S. Tenanted mines locally common. Vacated mines of *N. fragariella* Heyd. were also noted on this plant as well as on Agrimony (*q.v.*).

Malus sylvestris Miller (Crab-apple)

***Ectoedemia** (*Dechtiria*) *pulverosella* Staint. Several vacated mines. [Possibly still occurs in some of the old orchards, but records are lacking].

Quercus spp. (Oak)

****Ectoedemia** (*Dechtiria*) *albifasciella* Hein. Tenanted and vacated mines in small numbers throughout the wood.

Sorbus torminalis L. (Wild service tree)

One of the purposes of the visit was to search for the mines of *Stigmella torminalis* Wood, which has not been recorded from Somerset. None was found, but as only one wild service tree and a few saplings were located, the failure cannot be regarded as conclusive.

***Phyllonorycter** *corylifoliella* Haw. Mines were common, as they were on *Crataegus* and *Malus*. This species seems to have been accidentally omitted from Turner's list.

P. mespilella Hüb. A vacated *Phyllonorycter* mine with the pupal skin projecting was probably of this species. [Doubtfully resident at the present time].

****Parornix** *scoticella* Staint. Vacated mines and (on the same leaves) empty folded edges were almost certainly the work of this species which feeds on *Sorbus aria* agg. in the same manner.

Thelycrania sanguinea (L.) Fourreau (Dogwood)

Antispila pfeifferella Hüb. Vacated mines. [Very local.]

Tilia cordata Miller (Small-leaved lime)

Roeslerstammia erxlebelli Fab. Tenanted mines common. The early feeding of this larva seems to be unfamiliar to most entomologists. It makes a small mine, nearly always at the tip of the leaf. It effects its first moult in the mine, which it then quits to feed externally. [Very rare, associated with birch and lime.]

Bucculatrix thoracella Thunb. The short, vacated mines, moulting cocoons and nibbled undersides of the leaves were abundant, but the larvae had all gone. [Formerly reported as very common near Bristol, but now very scarce.]

Stigmella tiliae Frey. Three tenanted mines (in one of these the larva proved dead) and about a dozen vacated mines, mostly of the first generation. They were found mainly on inner, more or less concealed leaves. During its early life the larva mines only the lower surface of the leaf and the track is invisible unless it is held up to the light. Later the mine

occupies the whole thickness of the leaf, and is conspicuous. This last phase is brief, and the time for finding tenanted mines is correspondingly short. [A doubtful resident now].

***Coleophora hornigi* Toll (*paripennella* auct.) Two larvae found feeding on this rather unusual food-plant. Hering (1957) does, however, record it on lime.

What is the moral of this embarrassingly long catalogue of newly and rarely recorded species? First of all, the majority of them are not rare at all: they have just not been looked for. Until recently, there has been a dearth of lepidopterists interested in the smaller moths throughout Britain, and Bristol has been as hard hit as other parts of the country. I lived there from 1957 to 1963, but it was not until the last eighteen months that I took an interest in the micros, and I was still woefully ignorant of the whole subject. I was too reliant on my net, and my records were sketchy.

Secondly, Turner was a very cautious man. He compiled an excellent list, but was apt to consider that the absence of records for a species indicated the absence of the species itself. What in fact he was recording was a paucity of lepidopterists. An active and knowledgeable entomologist could turn up the majority of the moths he describes as probably extinct in the county.

Thirdly, Leigh Woods constitute an entomological locality of tremendous possibilities. The vegetation is lush and varied, and there are many rare foodplants to be found. A detailed survey would yield rich results.

This seems a good opportunity to make a correction and an addition to my Somerset notes of 1967. I there recorded *Nepticula distinguenda* Hein, as bred from mines taken at Shapwick on birch in 1965. At that time I knew nothing about leaf-mines and I did not even retain them. My determination was based on the bred imagines. Using Meyrick's key I identified some as *distinguenda* and others as *Stigmella betulicola* Staint. As Beirne (1945) does not depict the genitalia of either species, it is difficult to make a positive check of their identity. I am now of the opinion that they are all *betulicola*, a common and widely distributed species though unrecorded by Turner. *Distinguenda* on the other hand is a rare species, and although it is possible that it occurs at Shapwick, my record from that locality should be discounted.

I have also found a specimen of *Stigmella ulmivora* Fol. in a series of *Nepticula marginicolella* Staint. bred in 1963 from elm mines collected in Leigh Woods. This too is a new county record. I have already recorded *Phyllonorycter dubitella* from Leigh Woods (*Ent. Gaz.*, 22: 63).

Finally, let me apologise to any lepidopterist who may have already recorded from Somerset, any of the species I am presenting as new to the county. I am unaware of any supplement to Turner's list for the microlepidoptera other than my own notes of 1967.

REFERENCES

- Beirne, B. P. (1945). The Male Genitalia of the British *Stigmellidae*. *Proc. Roy. Irish Acad.*, 50B, No. 9, pp. 191-218.
- Emmet, A. M. (1967). Records of Lepidoptera in Somerset. *Ent. Record*, 79: 104-112.
- Hering, E. M. (1957). *Bestimmungstabellen der Blattminen von Europa*. Uitgeverij Dr W. Junk, 'S-Gravenhage.
- Meyrick, E. (1928). *A Revised Handbook of British Lepidoptera*. London.
- Turner, A. H. (1955). *Lepidoptera of Somerset*. Somerset Archaeological and Natural History Society.

Ireland, 1972

H. C. HUGGINS, F.R.E.S.

I spent my usual summer at Dingle, despite warnings from some of my friends here. I should say at once that it was most quiet and peaceful there, a good deal more restful than an English sea-side town at the week-end or one attracting football fans. It was, however, disappointing that only one couple of my usual friends from England came over, especially as now I am getting older, I missed my usual lifts to the mountains.

I left England by the Swansea-Cork boat on 14th June; the railway "go slow" had just ended and a telephone enquiry elicited the answer that I must not rely on the punctuality of the trains, so I was forced to hire a car from Westcliff to Swansea to make sure of not missing the boat.

When I reached Ireland the weather was very unpleasant, not particularly wet (do not mind that), but the coldest I have ever known in the country in my 35 visits, though several of these were in April and May.

For the first month a catch of 50 in the M.V. trap might be considered good, but when a heat wave arrived at the end of July, 1,000 was not unusual.

It was also the worst year for immigrants I have ever known; I saw but three *Vanessa atalanta* L. by day, and although I set the M.V. every night but 3 from 15th June to 5th September, there were only 7 immigrants in all, 5 *Plusia gamma* L., 1 *Leucania unipuncta* Haw. (a very nice female) and a huge female *Celerio galii* Rott! The last-named on 21st July calls for a little comment. It was a very wet night, and as my trap had got bashed about on my return last year, it let in a lot of water. Of course, the *galii* got below the egg cartons into the water and ruined herself as a specimen, which was pure cussedness, as over a dozen *Deilephila elpenor* L. were caught in the same night, and not one was injured. However, I managed to revive and feed her and she lived 3 days and laid 6 eggs. Only 1 of these hatched, but it gave me great pleasure to watch the larva pass through all the green stages to the final instar of chocolate with cream spots and a red head and horn. It pupated successfully and I have a fine healthy-